

REMARKS/ARGUMENTS

In view of the foregoing amendments and the following remarks, the applicant respectfully submits that the pending claims are not anticipated under 35 U.S.C. § 102 and are not rendered obvious under 35 U.S.C. § 103. Accordingly, it is believed that this application is in condition for allowance. **If, however, the Examiner believes that there are any unresolved issues, or believes that some or all of the claims are not in condition for allowance, the applicant respectfully requests that the Examiner contact the undersigned to schedule a telephone Examiner Interview before any further actions on the merits.**

The applicant will now address each of the issues raised in the outstanding Office Action. Before doing so, however, John Pokotylo would like to thank Examiner Strange for courtesies extended during a telephone interview on April 25, 2006 (referred to as "the telephone interview").

Rejections under 35 U.S.C. § 102

Claims 1, 12, 20 and 36-38 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,483,870 ("the Locklear patent"). The applicant respectfully requests that the Examiner reconsider and withdraw this ground of rejection in view of the following.

During the telephone interview, John Pokotylo and Examiner Strange discussed independent claims 1, 12 and 20, the Locklear patent, and in particular, the applicant's and the Examiner's interpretation of the Locklear patent. Briefly stated, the Examiner's position continues to be that "*identifying* one or more *available* links" and "using each of the identified link(s)" in the Locklear patent teaches "*selecting* ... one of at least two communications links" and using the selected link but not using the non-selected links. In the outstanding Office Action, the Examiner's position rebutting the applicant's interpretation of the Locklear patent is that if the Locklear patent were to send a request for service over all available links, all links would be

taken by the first session leaving no available links for any additional session, and that this would be illogical in a case where a session would only require a single link. John Pokotylo informed the Examiner that the Locklear patent provides for adding and dropping links, e.g., based on usage, and that this undercut his argument, leaving “identifying” to be interpreted according to its plain meaning, which is not “selecting.”

In any event, in order to expedite the prosecution of the application, John Pokotylo proposed claim amendments (as presented in this amendment) to clearly distinguish the claimed invention over even Examiner Strange’s interpretation of the Locklear patent. Specifically, selecting or assigning only one communications link (for session establishment purposes) is controlled such that selection or assignment of more than one communications link may not occur. Upon review of the proposed amendments, Examiner Strange indicated that the proposed amendments should distinguish the claimed invention over the Locklear patent. Accordingly, independent claims 1, 12 and 20, as amended, are not anticipated by the Locklear patent.

Since claims 36-38 depend from claims 1, 12 and 20, respectively, these claims are similarly not anticipated by the Locklear patent.

Rejections under 35 U.S.C. § 103

Claims 2-11, 13-19 and 21-35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Locklear patent in view of Mamakos, “A Method for Transmitting PPP Over Ethernet,” Request for Comments 2526 (Internet Engineering Task Force (Feb. 1999)) (“the Mamakos RFC”). The applicant respectfully requests that the Examiner reconsider and withdraw this ground of rejection in view of the following.

The Mamakos RFC defines a PPPoE standard. However, this standard does not compensate for the deficiencies of the Locklear patent with respect to base claims 1, 12 and 20, as amended, for the reasons discussed above. Accordingly, dependent claims 2-11, 3-19 and 21-35 are not rendered obvious by the Locklear patent and the

Mamakos RFC for the reasons discussed above with reference to amended claims 1, 12 and 20.

In addition, claim 4 which depends from claim 1, makes it clear that the establishment of a connection concerns the establishment of a session. PPPoE Active Discovery Initiation packets are normally broadcast. This is not inconsistent with the device 12 in Locklear, which sends a session request over each and every available link. However, the present invention prevents this normal case, and the possibility of looped acknowledge messages. Thus, these claims more clearly distinguish the present invention over the Locklear patent and the Mamakos RFC.

In addition, dependent claims 8, 19 and 24 clearly differentiate the policy factors considered by the present invention when selecting a link prior to session establishment, from the policy factors considered by the Locklear patent when determining whether to add a modem to, or remove a modem from, an established system.

Further, claims 26-28, which depend from claims 1, 12 and 20, respectively, further specify that data looping in the system, before the session is established, is prevented in the claimed methods or apparatus. The Examiner contends that column 7, lines 17-29 and column 9, lines 55-67 of the Locklear patent, prevent looping of the data. (See Paper No. 07202005, page 11.) Even assuming arguendo, that this is correct, such looping is only prevented *after a session has been established*.

The specification of the present application describes scenarios under which data looping may occur. Specifically, the specification states:

Recall from § 1.2.3.4 above that during a discovery stage of PPPoE, *when a host (e.g., a terminal 1512) wants to establish a connection using PPPoE, it broadcasts a PPPoE Active Discovery Initiation (or "PADI") packet and one or more access concentrators may respond with a PPPoE Active Discovery Offer (or "PADO") packet. Due to the broadcast nature of the PPPoE Active Discovery Initiation (PADI) packets, each one of the ATU-R units 1516 will forward these packets and, consequently, receive PPPoE Active Discovery Offer (PADO) packets in response. When a response is*

received via one ATU-R, situations can result where the response is actually looped back to the other ATU-R. This would occur if the user's Ethernet hub is a repeatered hub which sends all Ethernet frames it receives on one port out every other port. In turn, the Ethernet frame will cause the ATU-R which inadvertently receives the Ethernet frame to update its bridging table so that it believes the ISP's access router is now on the home LAN. This follows since it examines the Ethernet frame and sees a source MAC address that belongs to the ISP's router arriving on the port it uses to connect to the repeatered hub. This means that no traffic will flow through this ATU-R until such time as it receives an Ethernet frame, via the DSL line that it terminates, from the ISP's router. Hence, the ability to utilize a second DSL line can be significantly hampered by the looping of received traffic from the ISP. [Emphasis added.]

Page 30, line 29 through page 31, line 23. In contrast, the Locklear patent discusses splitting packets among one or more active modems using session identifiers associated with the modems. As the Examiner notes, column 9, lines 55-67 show that a table associates modems with session identifiers. This means that the session has already been established. However, as explained above, prior to establishment of the session, each and every available modem forwards a session request. (Recall, e.g., column 5, lines 1-7.) Thus, even if the session tables prevent looping, they only do so *after* the session has already been established.


Similarly, claims 30-35 further specify that data looping in the system, caused by session establishment, is prevented because data, session requests, or PPPoE Active Discovery Offer packets are forwarded to only the selected one of at least two communications links and not to any non-selected communications links. These claims recite the data that is prevented from being looped, as well as the means by which such looping is prevented. Accordingly, these claims further patentably define the invention over the cited art.

Conclusion

In view of the foregoing amendments and remarks, the applicant respectfully submits that the pending claims are in condition for allowance. Accordingly, the applicant requests that the Examiner pass this application to issue.

Respectfully submitted,

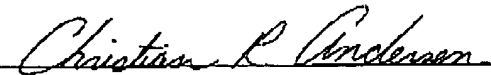
May 26, 2006


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Christian Andersen

May 26, 2006
Date